THE CLAIMS

A listing of the claims are as follows.

1. (Original) An anthraquinone compound of the general formula I or a salt thereof

$$\mathbb{R}^4$$
 \mathbb{R}^1
 \mathbb{R}^2

in which R^1 to R^4 are each selected from the group consisting of H, C_{1-4} alkyl, X^1 , -NHR^ON (R^5)₂ in which R^O is a C_{1-12} alkanediyl and each R^5 is H or optionally substituted C_{1-4} alkyl, and a group of formula II

$$-NH - R^0 - N - R^6$$

$$R^9 - R^7$$

$$R^8$$
(II)

in which at least one of R^6 , R^7 and R^8 is selected from X^2 , and X^2 substituted C_{1-4} alkyl and any others are H or C_{1-4} alkyl; R^9 is selected from H, C_{1-4} alkyl, X^2 and X^2 substituted C_{1-4} alkyl;

m is 0 or 1;

n is 1 or 2;

 X^{1} is a halogen atom, a hydroxyl group, a C_{1-6} alkoxyl group, an aryloxy group or an acyloxy group; and

 X^2 is a halogen atom, a hydroxyl group, a C_{1-6} alkoxyl group, an aryloxy group or an acyloxy group;

provided that at least one of R1 to R4 is a group of formula II.

- 2. (Original) A compound according to claim 1 in which R¹ and R² are each a group of formula II.
- 3. (Original) A compound according to claim 1 in which R^1 is a group of formula II and R^2 is NHR^ON (R^5)₂.
- 4. (Original) A compound according to claim 3 in which each R⁵ is the same and is H or CH₃.
- 5. (Previously Presented) A compound according to claim 2, in which R^1 is at position 4 in the anthraquinone ring system and R^2 is in position 1.
- 6. (Previously Presented) A compound according to claim 1, in which R³ and R⁴ are selected from H and hydroxyl.
- 7. (Original) A compound according to claim 6 in which R³ and R⁴ are both hydroxyl and are substituted at positions 5 and 8 in the anthraquinone ring system.
- 8. (Original) A compound according to claim 6 in which R³ and R⁴ are both H.
- 9. (Previously Presented) A compound according to claim 1, in which m is 1.
- 10. (Previously Presented) A compound according to claim 1, in which m is 0.
- 11. (Previously Presented) A compound according to claim 1, in which n is 2.
- 12. (Previously Presented) A compound according to claim 1, in which X^2 is a halogen atom or a leaving group.
- 13. (Original) A compound according to claim 12, in which X^2 is chlorine.

- 14. (Previously Presented) A compound according to claim 1, in which either
 - i) R⁶ is CH₂X³ and R⁷ is H; or
 - ii) R^6 is H and R^7 is X^3 .
- 15. (Original) A compound according to claim 14 in which R⁶ is CH₂X³ and R⁷ is H.
- 16. (Original) A compound according to claim 15 in which n is 2 and R^9 is CH_2X^3 in which X^3 is the same as X^3 in R^6 .
- 17. (Canceled)
- 18. (Previously Presented) A composition comprising a compound according to claim 9 and an excipient.
- 19. (Original) A composition according to claim 18 which is a pharmaceutical composition and in which the excipient is a pharmaceutically acceptable excipient.
- 20. (Currently Amended) A method of treating an animal by therapy, comprising administration to the animal of a medicament comprising Use of a compound according to claim 9 in the manufacture of a medicament for use in the treatment of an animal by therapy.
- 21. (Currently Amended) Use The method according to claim 20 in which the animal is a human.
- 22. (Currently Amended) Use The method according to claim 20 in which the animal is suffering from a tumour and the therapy is anti-tumour therapy.
- 23. (Currently Amended) Use The method according to claim 20 in which the compound is an anthraquinone compound of the general formula I or a salt thereof

,

$$R^4$$
 R^1
 R^3
 R^2

in which R^1 to R^4 are each selected from the group consisting of H, $C_{1\cdot4}$ alkyl, X^1 , -NHR^ON (R^5)₂ in which R^O is a $C_{1\cdot12}$ alkanediyl and each R^5 is H or optionally substituted $C_{1\cdot4}$ alkyl, and a group of formula II

$$-NH - R^0 - N - R^6$$

$$R^9 - R^7$$

$$R^8$$
(II)

in which at least one of R^6 , R^7 and R^8 is selected from X^2 , and X^2 substituted C_{1-4} alkyl and any others are H or C_{1-4} alkyl; R^9 is selected from H, C_{1-4} alkyl, X^2 and X^2 substituted C_{1-4} alkyl;

m is 1;

n is 1 or 2;

 X^{l} is a halogen atom, a hydroxyl group, a $C_{1\text{-}6}$ alkoxyl group, an aryloxy group or an acyloxy group; and

 X^2 is a halogen atom, a hydroxyl group, a C_{1-6} alkoxyl group, an aryloxy group or an acyloxy group;

provided that at least one of R¹ to R⁴ is a group of formula II

and in which the therapy additionally involves administration of a cytotoxic agent and/or radio therapy of the tumour, in which the animal is suffering from a tumour and the therapy is anti-tumour therapy.

24. (Original) A synthetic method in which a compound of the formula III

in which R^{11} to R^{14} are each selected from the group consisting of H, X^4 , hydroxyl, C_{1-4} alkoxy, acyloxy, a group $-NHR^{10}N$ (R^{15})₂ in which R^{10} is a C_{1-12} alkane diyl and each R^{15} is H or optionally substituted C_{1-4} alkyl, and in which X^4 is a halogen atom or a leaving group provided that at least one of R^{11} to R^{14} is X^4 ;

is reacted with a cyclic aminoalkylamine compound of the general formula IV

$$\begin{array}{c}
\begin{pmatrix}
O \\
\uparrow \\
R^{19}
\end{array}$$

$$\begin{array}{c}
R^{16}
\end{array}$$

$$\begin{array}{c}
R^{17}
\end{array}$$

$$\begin{array}{c}
R^{17}
\end{array}$$

such that the group \boldsymbol{X}^4 is replaced in a nucleophilic substitution reaction by a group of formula \boldsymbol{V}

$$-NHR^{10}HN^{\frac{q}{10}}$$

$$R^{10}$$

$$R^{10}$$

$$R^{10}$$

$$R^{10}$$

$$R^{10}$$

$$R^{10}$$

in which either at least one of R^{16} , R^{17} and R^{18} is selected from X^5 and X^5 substituted C_{1-4} alkyl, and R^{19} is selected from H, C_{1-4} alkyl, X^5 and X^5 substituted C_{1-4} alkyl

 X^5 is hydroxyl or a protected hydroxyl, or X^5 is a leaving group or a halogen atom different to X^4 and q is 0 or 1.

- 25. (Original) A method according to claim 24 in which at least one group X^5 is hydroxyl or protected hydroxyl and in which the product is reacted with a halogenating compound optionally after deprotection to replace the or each X^5 hydroxyl group by a halogen atom.
- 26. (Original) A method according to claim 25 in which the halogenating agent is a chlorinating agent.
- 27. (Previously Presented) A method according to claim 24, in which q is 0 and the product is oxidised at the ring nitrogen atom to form the corresponding amine oxide (q is 1).
- 28. (Previously Presented) A method according to claim 24, in which one of R^{11} to R^{14} is a group -NHR¹⁰N (R^{15})₂ and which involves the preliminary step of reacting a precursor compound in which the corresponding group X^6 where X^6 is a halogen atom or a leaving group, with an acyclic aminoalkylamine compound of general formula VI

$$-NHR^{10}N(R^{15})_2$$
 (VI)

In a preliminary nucleophilic substitution reaction in which X^6 is replaced by the group $-NHR^{10}N$ (R^{15})₂, in which R^{15} is H or an optionally substituted C_{1-4} alkyl group.

29. (Previously Presented) A method according to claim 23, in which R^{11} and R^{12} are the same and are X^5 and in which 2 equivalents of the cyclic aminoalkylamine compound IV are reacted whereby both groups X^4 are replaced by the said group of general formula V.

30-36. (Canceled)

37. (Previously Presented) A compound according to claim 10 for use in a method of treatment of an animal by therapy.

- 38. (Previously Presented) A compound according to claim 12 for use in a method of treatment of an animal by therapy.
- 39. (Previously Presented) A composition comprising a compound according to claim 10 and an excipient.
- 40. (Previously Presented)A composition comprsing a compound according to claim 12 and an excipient.
- 41. (Previously Presented) Use of a compound according to claim 10 in the manufacture of a medicament for use in the treatment of an animal by therapy.
- 42. (Previously Presented) Use of a compound according to claim 12 in the manufacture of a medicament for use in the treatment of an animal by therapy.
- 43. (Currently Amended) Use The method according to claim 21 in which the compound is an anthraquinone compound of the general formula I or a salt thereof

in which R^1 to R^4 are each selected from the group consisting of H, C_{1-4} alkyl, X^1 , -NHRON $(R^5)_2$ -NHRON $(R^5)_2$ in which RO R^0 is a C_{1-12} alkanediyl and each R^5 is H or optionally substituted C_{1-4} alkyl, and a group of formula II

$$-NH - R^0 - N - R^6$$

$$R^9 - R^8$$

$$R^7$$

$$R^8$$

in which at least one of R^6 , R^7 and R^8 is selected from X^2 , and X^2 substituted C_{1-4} alkyl and any others are H or C_{1-4} alkyl; R^9 is selected from H, C_{1-4} alkyl, X^2 and X^2 substituted C_{1-4} alkyl;

m is 1;

n is 1 or 2;

 X^{1} is a halogen atom, a hydroxyl group, a C_{1-6} alkoxyl group, an aryloxy group or an acyloxy group; and

 X^2 is a halogen atom, a hydroxyl group, a $C_{1\text{-}6}$ alkoxyl group, an aryloxy group or an acyloxy group;

provided that at least one of R1 to R4 is a group of formula II

and in which the therapy additionally involves administration of a cytotoxic agent and/or radio therapy of the tumour, in which the animal is suffering from a tumour and the therapy is anti-tumour therapy.